



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/696,517	10/29/2003	Prasad V. Gade	DP-304939	6380
22851	7590	01/25/2007	EXAMINER	
DELPHI TECHNOLOGIES, INC. M/C 480-410-202 PO BOX 5052 TROY, MI 48007			MANCHO, RONNIE M	
			ART UNIT	PAPER NUMBER
			3663	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/25/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/696,517	GADE ET AL.	
	Examiner	Art Unit	
	Ronnie Mancho	3663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 03 November 2006.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 24-30 and 38-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 24-30, 38-45 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____.
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date _____.	6) <input type="checkbox"/> Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of claims 24-30, 38-45, and the species of fig. 3 in the reply filed on 11/3/06 is acknowledged. The traversal is on the ground(s) that the figures show different embodiments and are meant to be taken together. Applicant further states that they do not represent distinct and separate inventions.

The species restriction has been withdrawn according to applicant's arguments.

2. Claims 31-37 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Applicant timely traversed the restriction (election) requirement in the reply filed on 11/3/06.

The requirement is still deemed proper and is therefore made FINAL.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned

Art Unit: 3663

with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 24-30, 38-45 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-23 of copending Application No. US 2003/0025255; claims 1-45 of copending application US 2006/0173592.

Although the conflicting claims are not identical, they are not patentably distinct from each other because claims of the present invention are found in the above pending applications.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

5. Claims 24-30, 38-45 rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-22 of U.S. Patent No. 6754571. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of US 6754571 read on claims 24-30, 38-45 of the invention.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 24-30, 38-45 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Applicant elected the species of fig. 3; however, the species of fig. 3 does not disclose all the limitations of the above claims. Support of the above is further gleaned from applicant's response dated 11/3/06, wherein the applicant does not cite the claims which apply to fig. 3.

Further, one skilled in the art gleaned on the teachings of fig. 3 alone will not be able to make the invention as claimed.

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 24-30, 38-45 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

10. In claims 24, 38, and 45, the applicant recites "maximum vibration". It is not clear what all is meant and encompassed by "maximum" in the claimed "maximum vibration".

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. Claims 24-30, 38-45 are rejected under 35 U.S.C. 102(b) as being anticipated by Mokeddem (5829319).

Regarding claim 24, Mokeddem (abstract) discloses a method of controlling a hydraulic mount (10, col. 2, line 52+) of an object (i.e. engine) having a bounce resonance frequency, comprising:

calibrating at least one tunable parameter (controlling torsion damping frequency, abstract, line 1) of a control system of the mount (torsion damper 10) based on the bounce resonant frequency (col. 1, lines 39-54) of the object (i.e. engine);
generating a first acceleration signal (col. 3, lines 33 to col. 4);
generating a second acceleration signal (col. 3, lines 33 to col. 4);
determining 86 (col. 3, line 25) a relative acceleration (vibration, col. 3, lines 33-42) across the mount (col. 2, lines 7-16) based on the first and second acceleration signals; generating a control signal (88, cool. 3, lines 31&32) responsive to the relative acceleration (vibration, col. 3, lines 33-42) based on the at least one tunable parameter (tuning frequency of damper 10, col. 3, line38-42); and
controlling the flow of MR mount fluid in the mount 10 responsive to the control signal such that maximum vibration damping occurs at a predetermined band of frequencies (col. 3, lines 33-42).

Regarding claim 25, Mokeddem (abstract) discloses the method of claim 24 wherein the predetermined band of frequencies occurs at and around the resonance bounce frequency of the object (i.e. engine col. 2, lines 7-32).

Regarding claim 26, Mokeddem (abstract) discloses the method of claim 25 wherein calibrating at least one tunable parameter comprises tuning an objective function obtained by a sensitivity function (see sensor 86, col. 3, lines 33-42).

Art Unit: 3663

Regarding claim 27, Mokeddem (abstract) discloses the method of claim 326 wherein calibrating at least one tunable parameter comprises tuning a weighting function (algorithm, col. 2, lines 26-32).

Regarding claim 28, Mokeddem (abstract) discloses the method of claim 27 wherein the weighting function is limited to the resonance bounce frequency (col. 2, lines 7-32).

Regarding claim 29, Mokeddem (abstract) discloses the method of claim 28 wherein calibrating at least one tunable parameter comprises tuning an associated scalable factor (current, col. 2, line 17-25).

Regarding claim 30, Mokeddem (abstract) discloses the method of claim 29 wherein the associated scalable factor is used to increase and decrease the magnitude of the weighting function (col. 3, lines 28-45).

Regarding claim 38, Mokeddem (abstract) discloses a system for controlling a hydraulic mount (10, col. 2, line 52+) of an object (i.e. engine) having a bounce resonance frequency, comprising:

Means for modifying at least one tunable parameter (controlling torsion damping frequency, abstract, line 1) of a control system of the mount (torsion damper 10) based on the bounce resonant frequency (col. 1, lines 39-54) of the object (i.e. engine);

Means for generating a first acceleration signal (col. 3, lines 33 to col. 4);

Means for generating a second acceleration signal (col. 3, lines 33 to col. 4);

Means determining 86 (col. 3, line 25) a relative acceleration (vibration, col. 3, lines 33-42) across the mount (col. 2, lines 7-16) based on the first and second acceleration signals;

Means for generating a control signal (88, col. 3, lines 31&32) responsive to the relative acceleration (vibration, col. 3, lines 33-42) based on the at least one tunable parameter (tuning frequency of damper 10, col. 3, line 38-42); and

Means for controlling the flow of MR mount fluid in the mount 10 responsive to the control signal such that maximum vibration damping occurs at a predetermined band of frequencies (col. 3, lines 33-42).

Regarding claim 39, Mokeddem (abstract) discloses the method of claim 38 wherein the predetermined band of frequencies occurs at and around the resonance bounce frequency of the object (i.e. engine col. 2, lines 7-32).

Regarding claim 40, Mokeddem (abstract) discloses the method of claim 39 wherein the means for tuning at least one tunable parameter comprises an objective function obtained by a sensitivity function (see sensor 86, col. 3, lines 33-42).

Regarding claim 41, Mokeddem (abstract) discloses the method of claim 40 wherein the means for tuning at least one tunable parameter comprises a weighting function (algorithm, col. 2, lines 26-32).

Regarding claim 42, Mokeddem (abstract) discloses the method of claim 41 wherein the weighting function is based on the resonance bounce frequency (col. 2, lines 7-32).

Regarding claim 43, Mokeddem (abstract) discloses the method of claim 42 wherein the means for tuning at least one tunable parameter comprises an associated scalable factor (current, col. 2, line 17-25).

Art Unit: 3663

Regarding claim 44, Mokeddem (abstract) discloses the method of claim 43 wherein the associated scalable factor is used to increase and decrease the magnitude of the weighting function (col. 3, lines 28-45).

Regarding claim 45, Mokeddem (abstract) discloses a system for a hydraulic mount (10, col. 2, line 52+) for a vibrating object (i.e. engine), comprising:

Means for generating a first acceleration signal (col.1, lines 39-54; col. 3, lines 33 to col. 4);

Means for generating a second acceleration signal (col.1, lines 39-54; col. 3, lines 33 to col. 4);

Means determining 86 (col. 3, line 25) a relative acceleration (vibration, col. 3, lines 33-42) across the mount (col. 2, lines 7-16) based on the first and second acceleration signals;

Means for generating a control signal (88, cool. 3, lines 31&32) responsive to the relative acceleration (vibration, col. 3, lines 33-42; col. 3, line38-42); and

Means for controlling the flow of MR mount fluid in the mount 10 responsive to the control signal (col. 3, lines 33-42);

means for tuning the control system such that maximum vibration damping occurs at and around the engine resonance bounce frequency (col. 3, lines 33-42).

Communication

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronnie Mancho whose telephone number is 571-272-6984. The examiner can normally be reached on Mon-Thurs: 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Keith can be reached on 571-272-6878. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ronnie Mancho
Examiner
Art Unit 3663

January 20, 2007

JACK KEITH
SUPERVISORY PATENT EXAMINER